

The Net Zero Carbon Transition

11 July 2024
Bangkok, Thailand



Dr. Phirun Saiyasitpanich

Director General

Department of Climate Change and Environment

“ The era of global warming has ended; the era of global boiling has arrived. Leaders must lead. No more hesitancy. No more excuses. No more waiting for others to move first. There is simply no more time for that. It is still possible to limit global temperature rise to 1.5 degrees Celsius and avoid the very worst of climate change. But only with dramatic, immediate climate action. ”

“

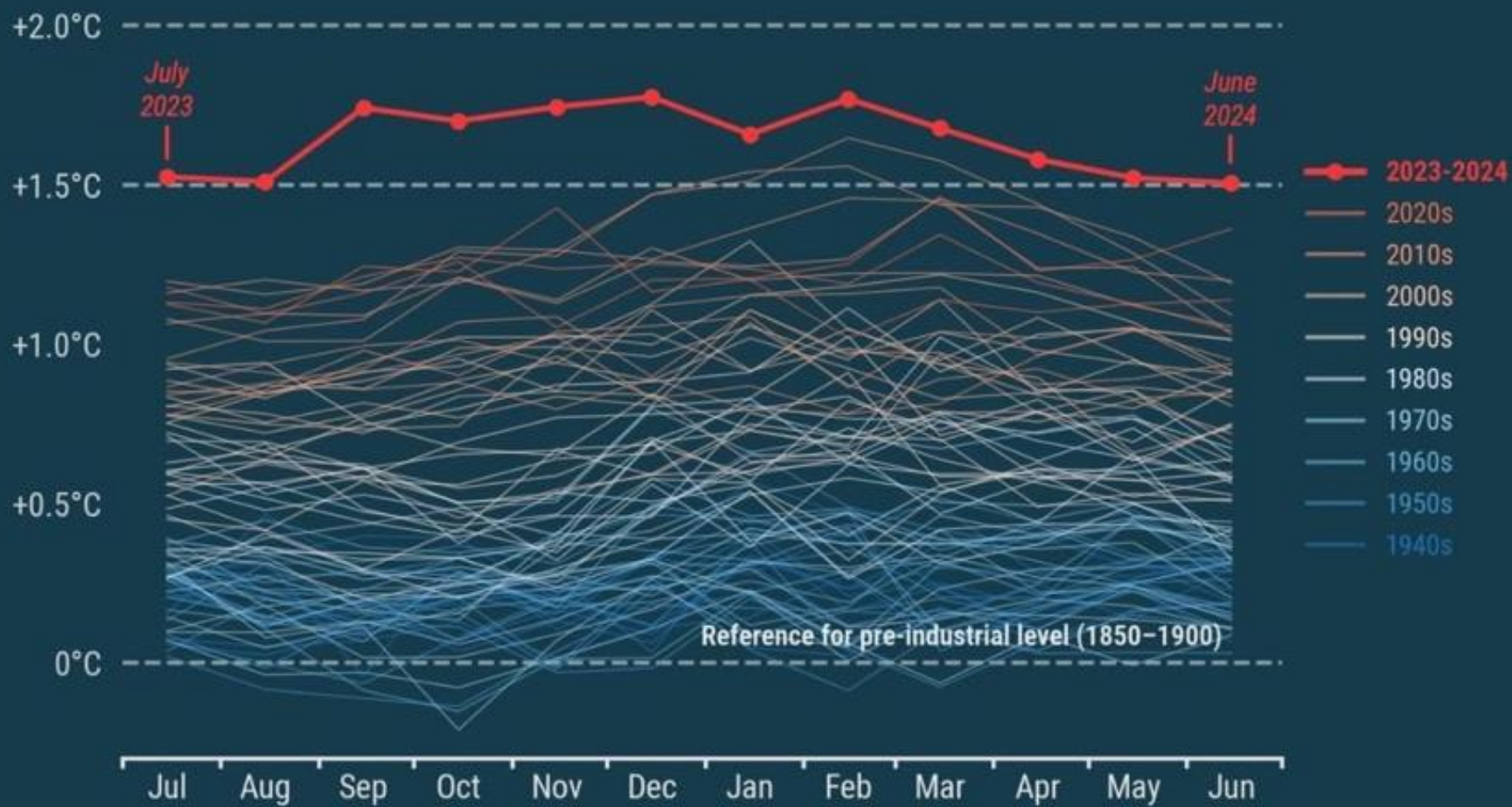
The era of global warming has ended; the era of global boiling has arrived.”



António Guterres, UN Secretary-General
Opening remarks at press conference on climate
27 July 2023

Monthly global surface temperature increase above pre-industrial

Data: ERA5 1940-2024 • Reference period: 1850-1900 • Credit: C3S/ECMWF



PROGRAMME OF THE
EUROPEAN UNION



Extreme event

The New York Times AUSTRALIA | What to Read on Australia's Bushfire Crisis



A house burning in Lake Conjola, New South Wales, on New Year's Eve. Matthew Abbott for The New York Times

Slow onset

22 September 2023 08:56 am Views - 2396 3 Bookmark



Plants in Antarctica are growing more quickly due to climate change, which could represent a pot for the region's changing ecosystem.

BBC

Home News Sport Business Innovation Culture Travel Earth Video Live

UN food chief: Poorest areas have zero harvests left

17 June 2024
By Aleks Phillips, BBC News



The UN says 40% of the world's land is already unable to sustain crops

Italy hit by severe flooding after heavy rain

17 May 2024
By Nadia Ragozhina, BBC News



The constant rain in Milan this week saw the River Lambro burst its banks

Canada government links June heat wave to climate change



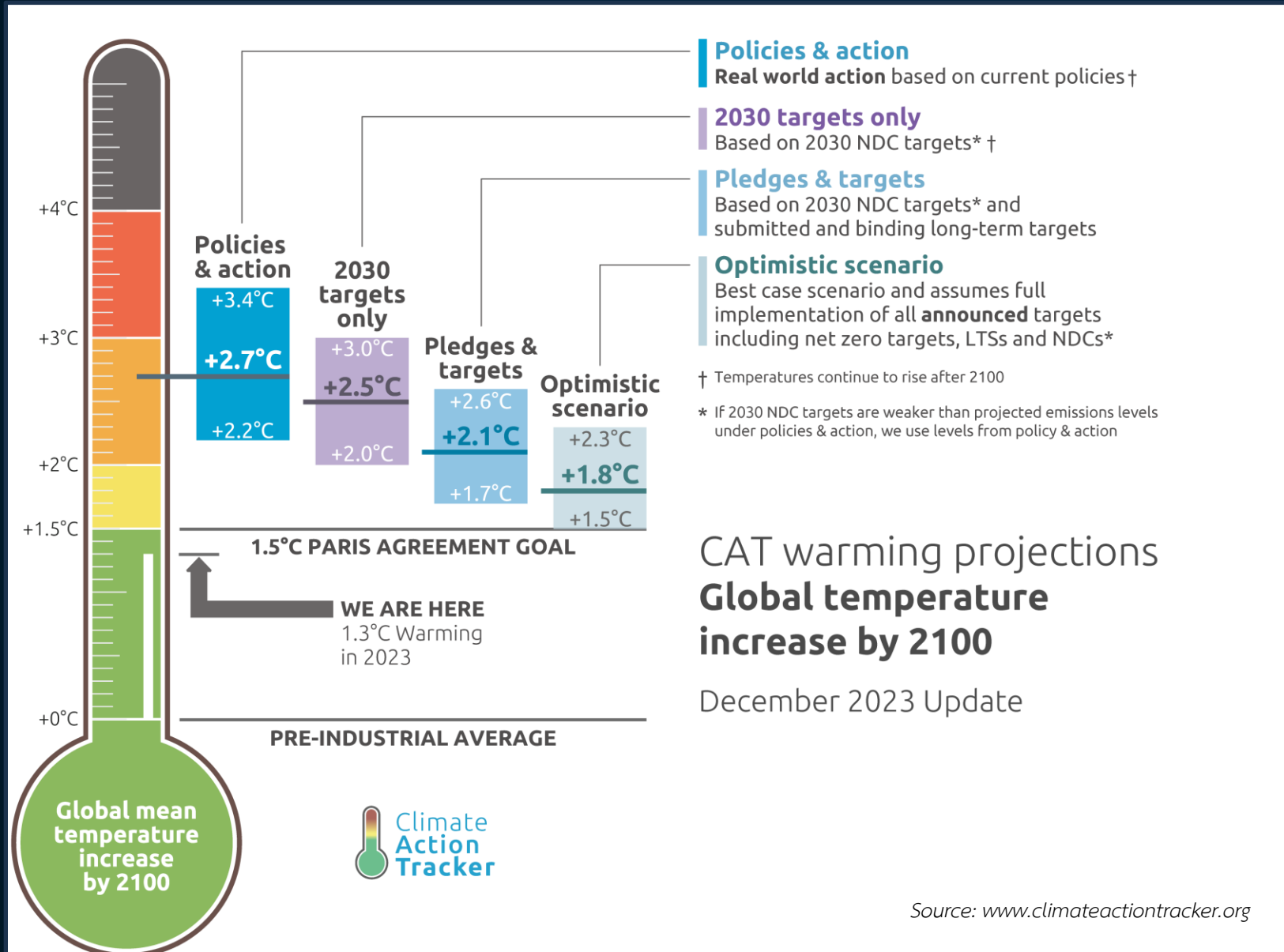
Pedestrians on the oceanside Dallas Road pathway during a heatwave in Victoria, British Columbia, Canada, July 6, 2024. PHOTO: BLOOMBERG



This Pacific island country is disappearing. What happens next?

Tuvalu, a Pacific island nation on the frontline of the climate crisis, is fighting to retain its land—and its identity.

Why 1.5 °C

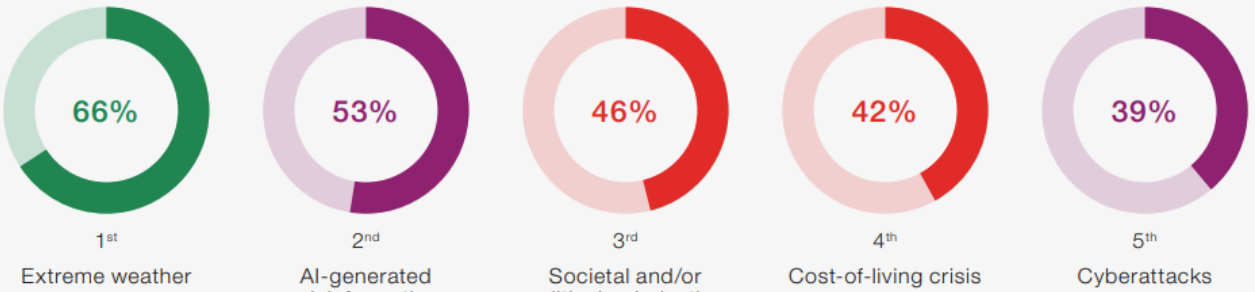


- Current policies and actions worldwide being implemented, will cause the increase in average temp. by 2.7 °C
- NDCs 2030 will cause the increase in average temp. by 2.5 °C
- Pledges and long-term targets will cause the increase in average temp. by 2.1°C



Not enough to combat global warming and keeping the PA goal alive

World Economic Forum 2024



- Risk categories
- Economic
 - Environmental
 - Geopolitical
 - Societal
 - Technological

2 years



10 years



By 2050, climate change is likely to cause an additional 14.5 million deaths and \$12.5 trillion in economic losses worldwide



Sustainable business
Emission report

Green supply chain
Energy transition

Carbon Credit Marketplace
Carbon Tax

CARBON BORDER ADJUSTMENT MECHANISM

In its first phase, the CBAM will focus on goods most at risk of carbon leakage:



Congress Introduces US CBAM: The "Clean Competition Act"

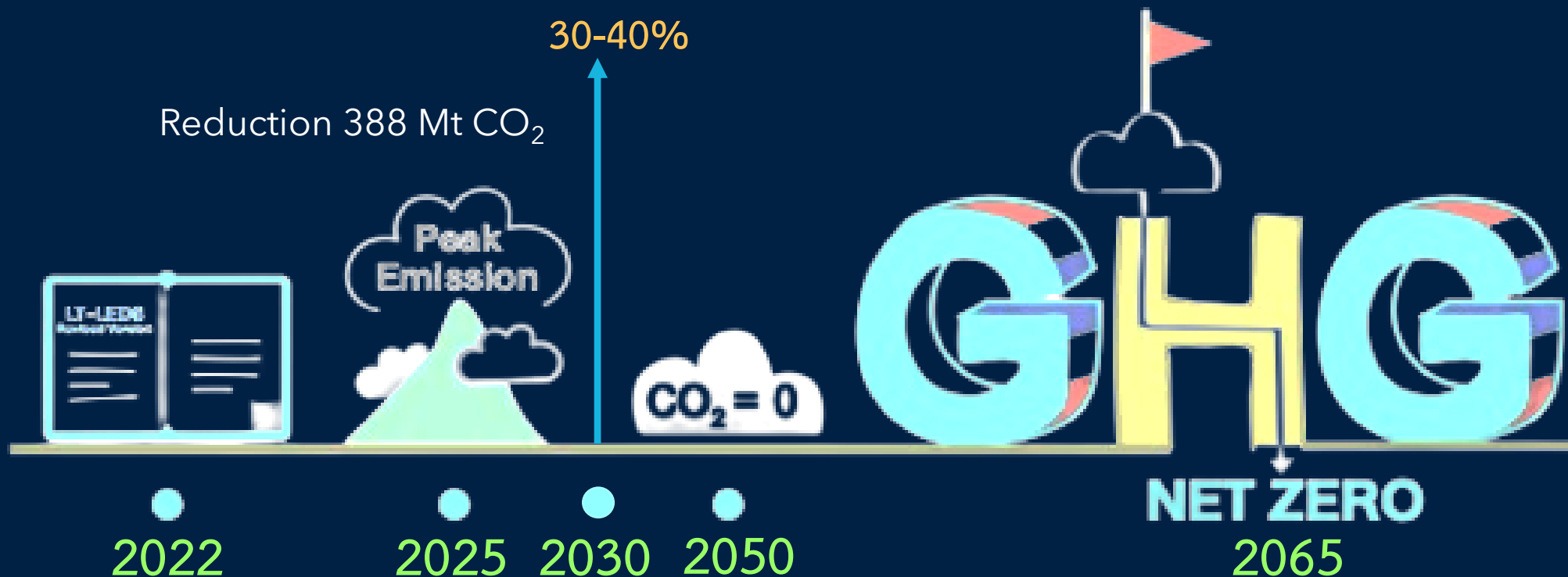


EUROPEAN GREEN DEAL



First milestone **Emission Peak 2025**

Moving forward to → **Carbon Neutrality 2050** → **Net Zero Emission 2065**



Thailand's Decarbonization Pathway

Thailand's NDC Implementation

NDC 1

40 %

Energy Transpo IPPU Waste Agriculture



124.6 (22.4 %)	45.6 (8.2 %)	1.4 (0.3 %)	9.1 (1.6 %)	4.1 (0.7 %)
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Unit MtCO₂eq

Domestic

184.8 MtCO₂eq (33.3%)

International Support

37.5 MtCO₂eq (6.7%)

total 222 MtCO₂eq

NDC Tracking 2021

60.33 MtCO₂eq GHG reduction



Energy

49.59 MtCO₂eq



Transport

0.30 MtCO₂eq



IPPU

0.4 MtCO₂eq



Waste

6.09 MtCO₂eq



Agriculture

3.95 MtCO₂eq



Guidance on Climate Change Management

Article 6 of Paris Agreement 3 %

Article 6.2
Draft Criteria



Additionality
NDC action plan 30-40%

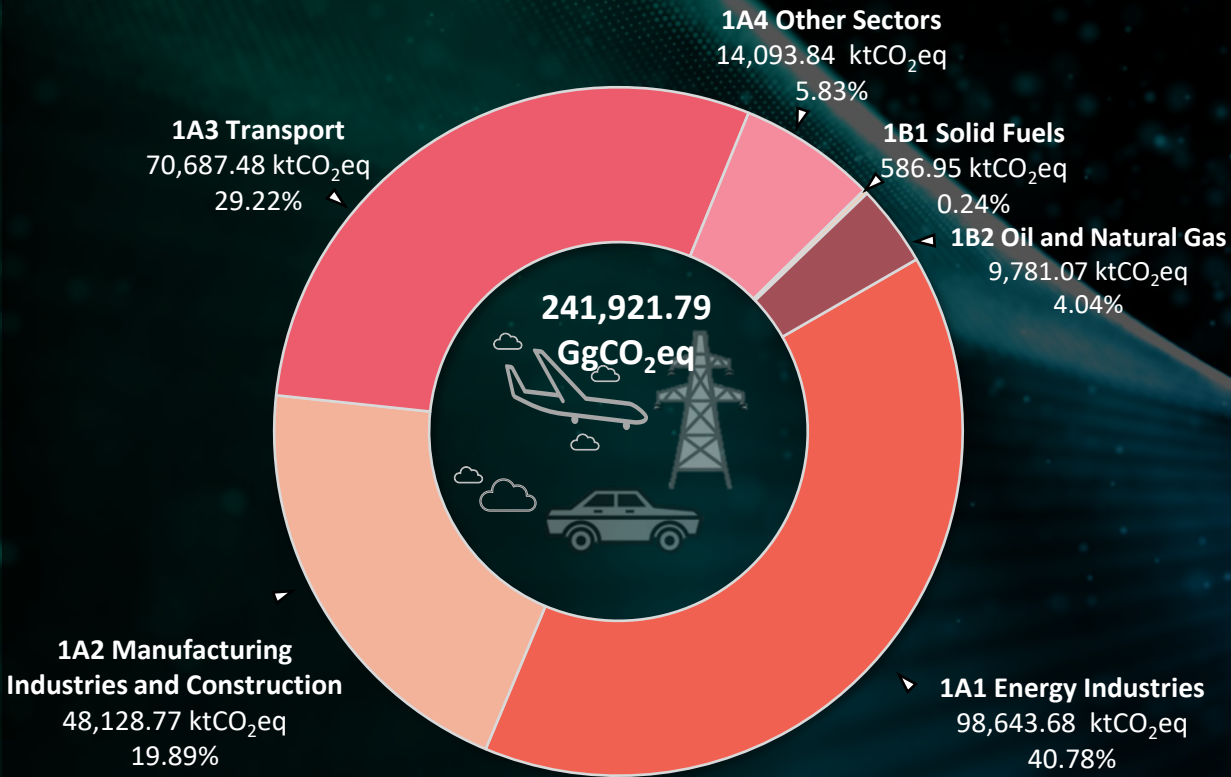
NDC 2030 period

Sustainability beyond 2030

High Technology/High cost

*10% deduction for
corresponding adjustment*

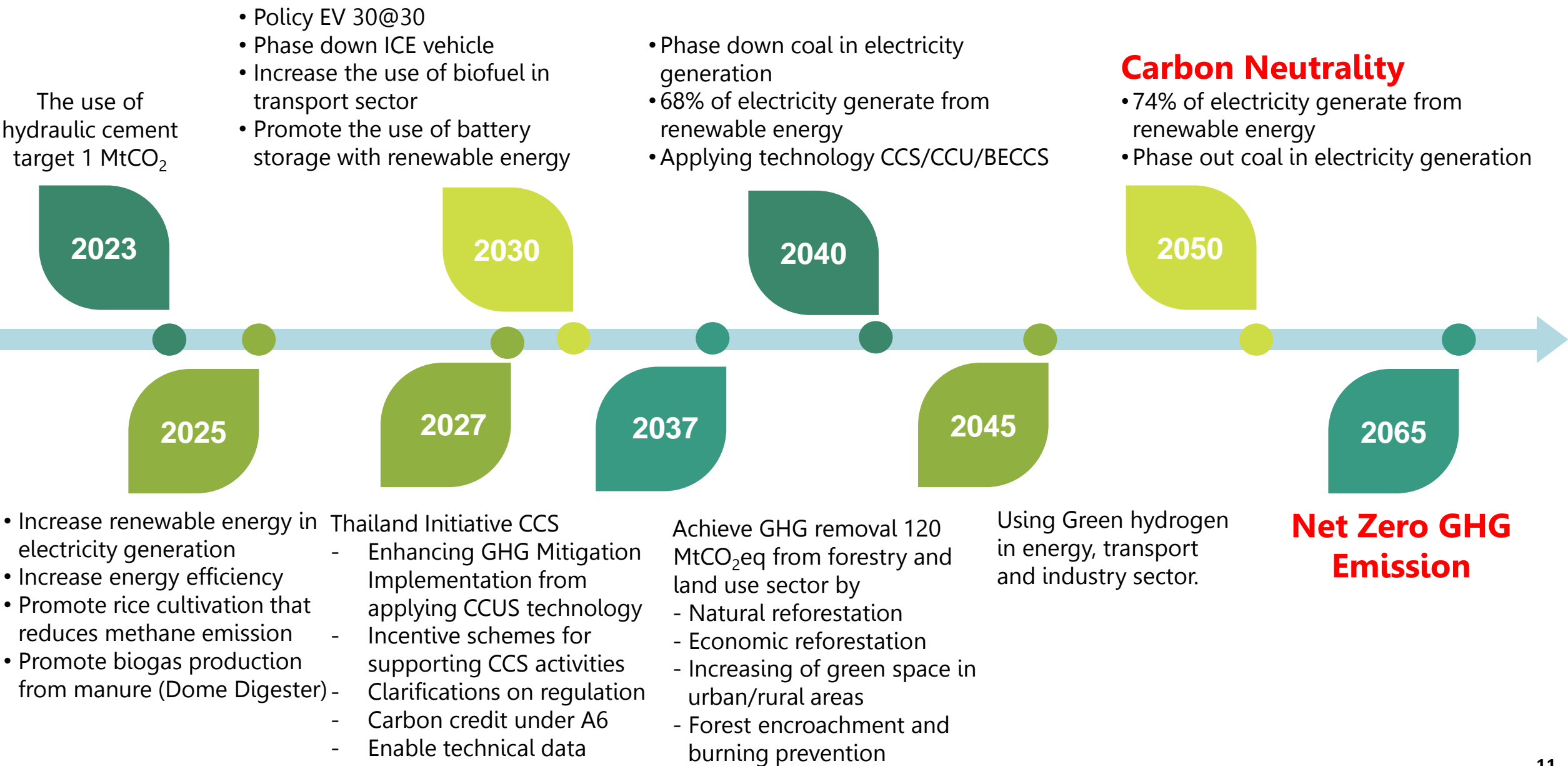
Energy Sector



Greenhouse gas source	Emission (ktCO ₂ eq)
1A2 Manufacturing industries and construction	48,128.77
1A4 Other sectors	14,093.84
1A4a Commercial / Institutional	1,558.68
1A4b Residential	6,059.12

GHG emissions in Energy sector in 2021

Thailand Technology Roadmap to Net Zero by 2065



Climate Change Act



- Boost public participation toward the low carbon economy and society



- Development of measures, tools, both voluntary and mandatory covering adaptation and mitigation aspects



- Development of financial mechanism



- Create enabling environment that supports low carbon investment

















- Development of tracking and assessment of climate change mitigation and adaptation

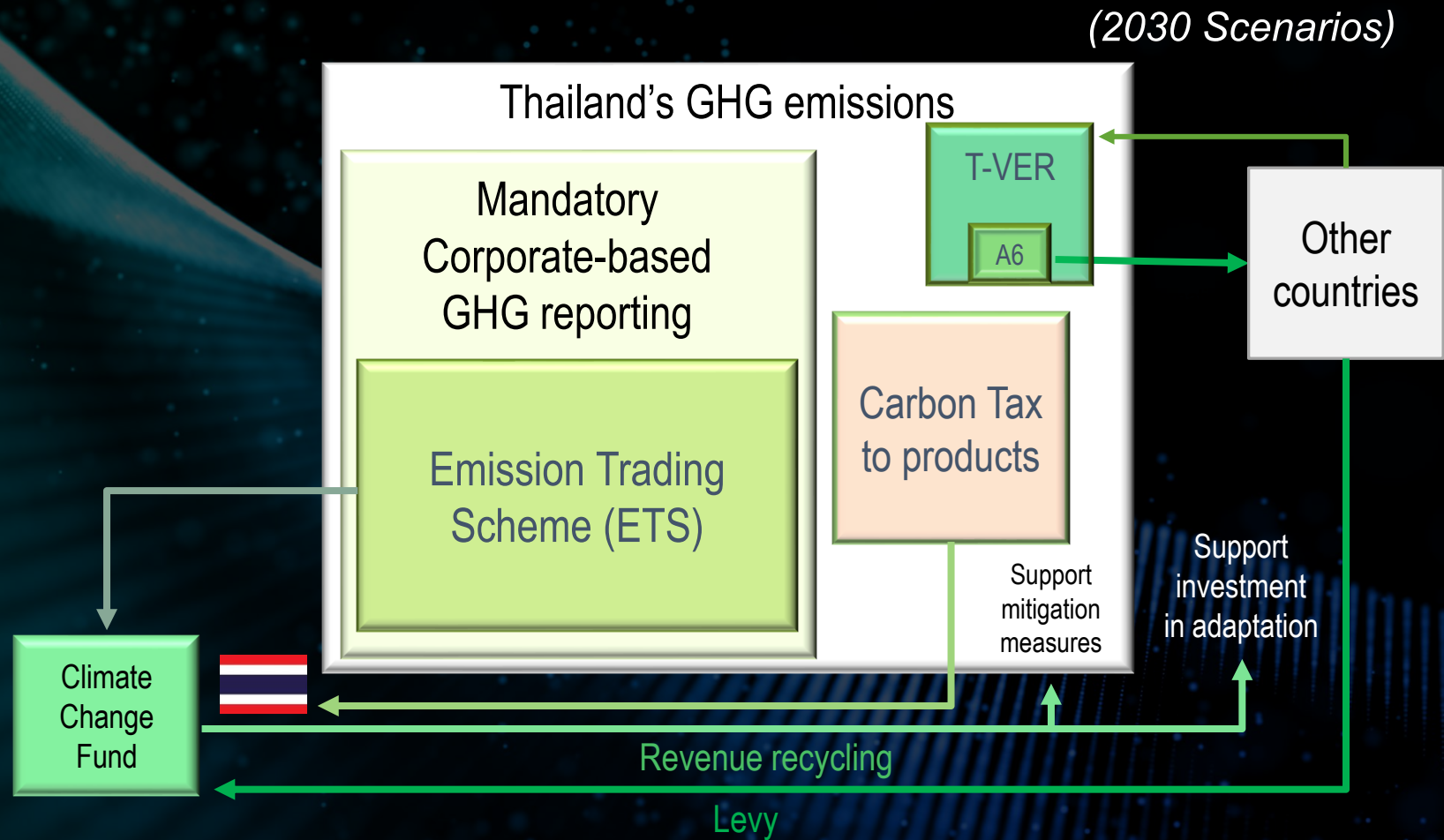
Climate Change Act



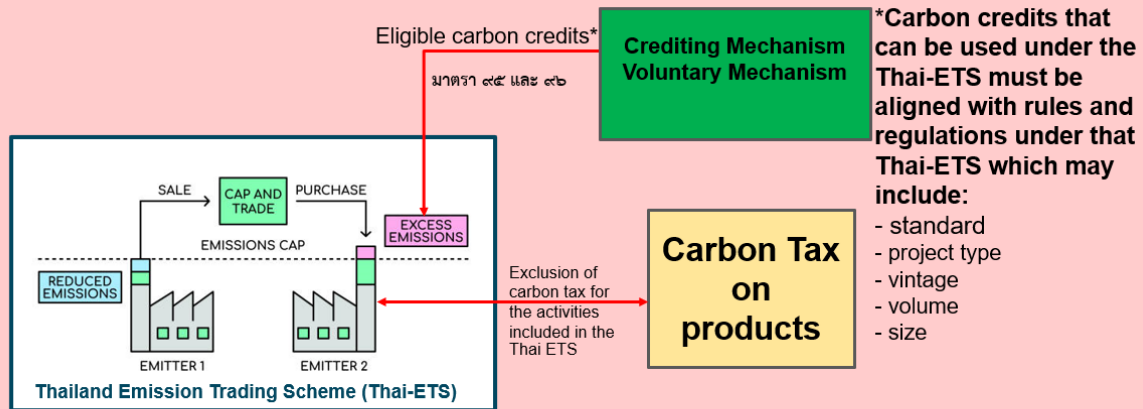
DRAFT THAILAND CLIMATE CHANGE ACT

Designing a Framework for Climate Change Act

-  **Section 1:**
General
-  **Section 2:**
GHGs targets
-  **Section 3:**
National committee
-  **Section 4:**
Climate Change Fund
-  **Section 5:**
CC Master Plan
-  **Section 6:**
GHGs Information
-  **Section 7:**
GHG Mitigation
-  **Section 8:**
ETS
-  **Section 9:**
Carbon Tax
-  **Section 10:**
Carbon Credit
-  **Section 11:**
Adaptation
-  **Section 12:**
Supportive Mechanism
-  **Section 13:**
Taxonomy
-  **Section 14:**
Penalties
-  **Transitory Provision**



Carbon Pricing Instrument



TAX INCENTIVE

THAILAND BOARD OF INVESTMENT

- Tax incentives for GHG reduction activities
- Measures to incentivize environmentally friendly activities

GREEN BOND

Positive Environmental and/or Climate Benefit



ESG Bond



Promote Investment



Sustainability-Link Bond

THAILAND TAXONOMY

A Framework to Guide and Enhance Financial Investments in Sustainable, Low Greenhouse Gas Emitting Activities.



Phase I Energy Transport



Phase II Agriculture industry
Construction and Real Estate Waste

Key highlights: COP 29

Global Stocktake (GST)

Bridging the 1st GST to enhance NDC 2035 that align with pathway

Adaptation

Discussion for the global and area-based indicator under the GGA

Technology

Integrate technological and financial mechanisms to build capacity of developing country parties

Loss and Damage

Consideration for details of the implementation of the L&D fund

Climate Finance

Consideration of the new collective quantified on climate finance



THANK YOU

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